

**SFMTA**

Municipal Transportation Agency

# SF Transit Effectiveness Project

Nathaniel P. Ford Sr.

**MTC Workshop**  
**Sustaining the Region's Transit System**

10 | 21 | 2009 | SAN FRANCISCO, CALIFORNIA

## **Service Design and Delivery**

## **Cost Containment**

## **Governance and Decision-making**

# SFMTA Overview

- Multi-modal transportation agency
- Planner, Designer, Builder, Operator
  - 5 Transit Modes
  - Street Network, Signals & Systems
  - Pedestrian & Bicycle Networks
  - Parking Supply & Management
  - Station Area Development
  - Taxi Administration
  - Street Enforcement



## Transit Service Overview

- **80 routes**
- **225 million annual boardings**
- **5 different modes**
  - Muni Metro; Historic Streetcar; Cable Car
  - Motorcoach; Trolleycoach



# What is the Transit Effectiveness Project?

- **First review of Muni in a generation**

- Jointly sponsored by SFMTA and SF Controller's Office
- Better data than ever before
- Extensive customer and employee input

- **Objectives**

- Make Muni service more reliable, convenient and attractive to our customers
- Contribute to long-term financial stability
- Develop 5-year roadmap to transform Muni service and better meet our customer and employee needs



# TEP Priority Initiatives

- **Improve Reliability**
  - Make service more predictable to build customer confidence before implementing proposed route changes
- **Reduce Travel Times**
  - Develop small- and large-scale strategies to reduce delay, enhance pedestrian safety, and get more service from existing resources
- **Update Muni Routes**
  - Redesign routes and adjust service to benefit the maximum number of Muni customers

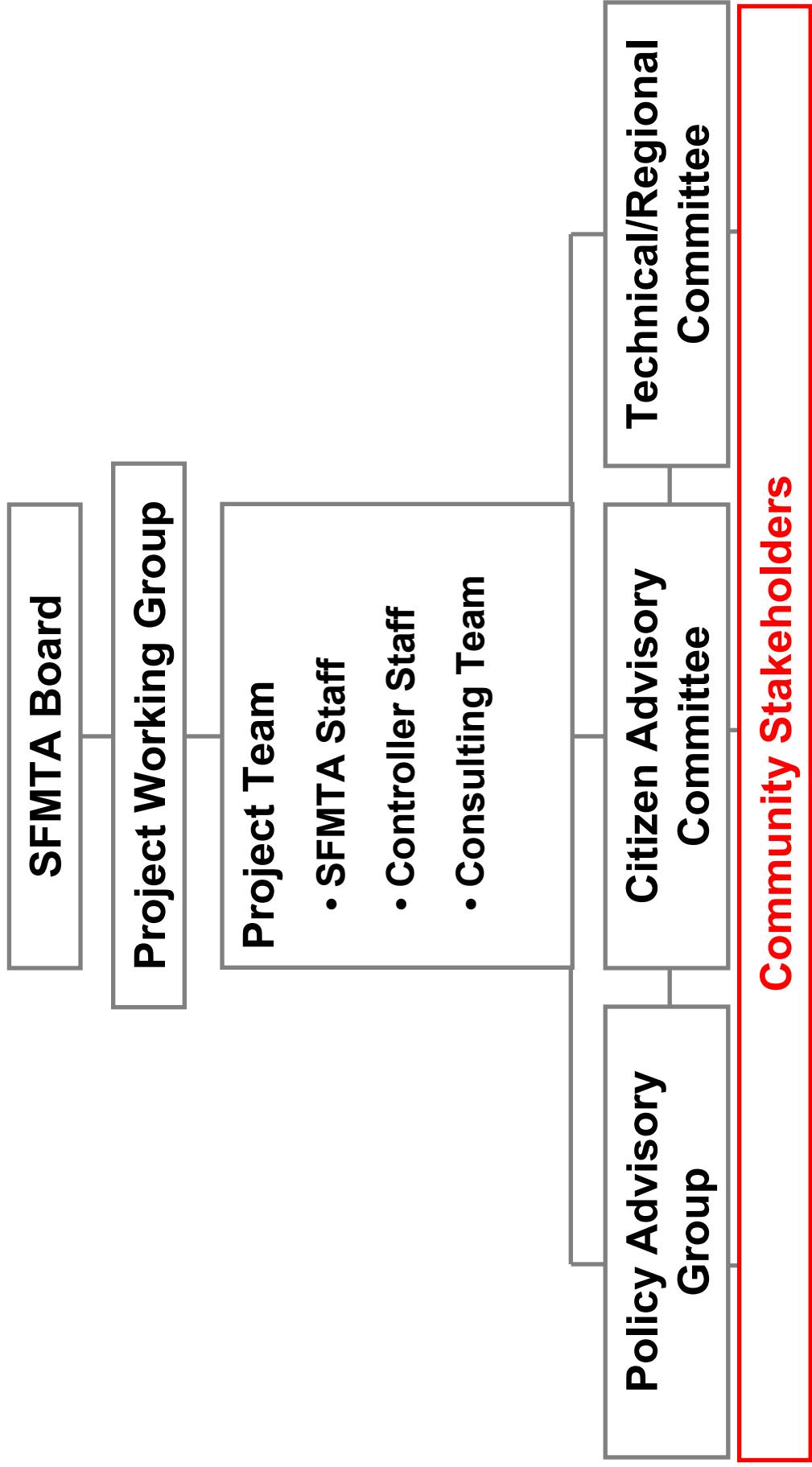


# TEP Process

*Emphasizes transparency in decision making*

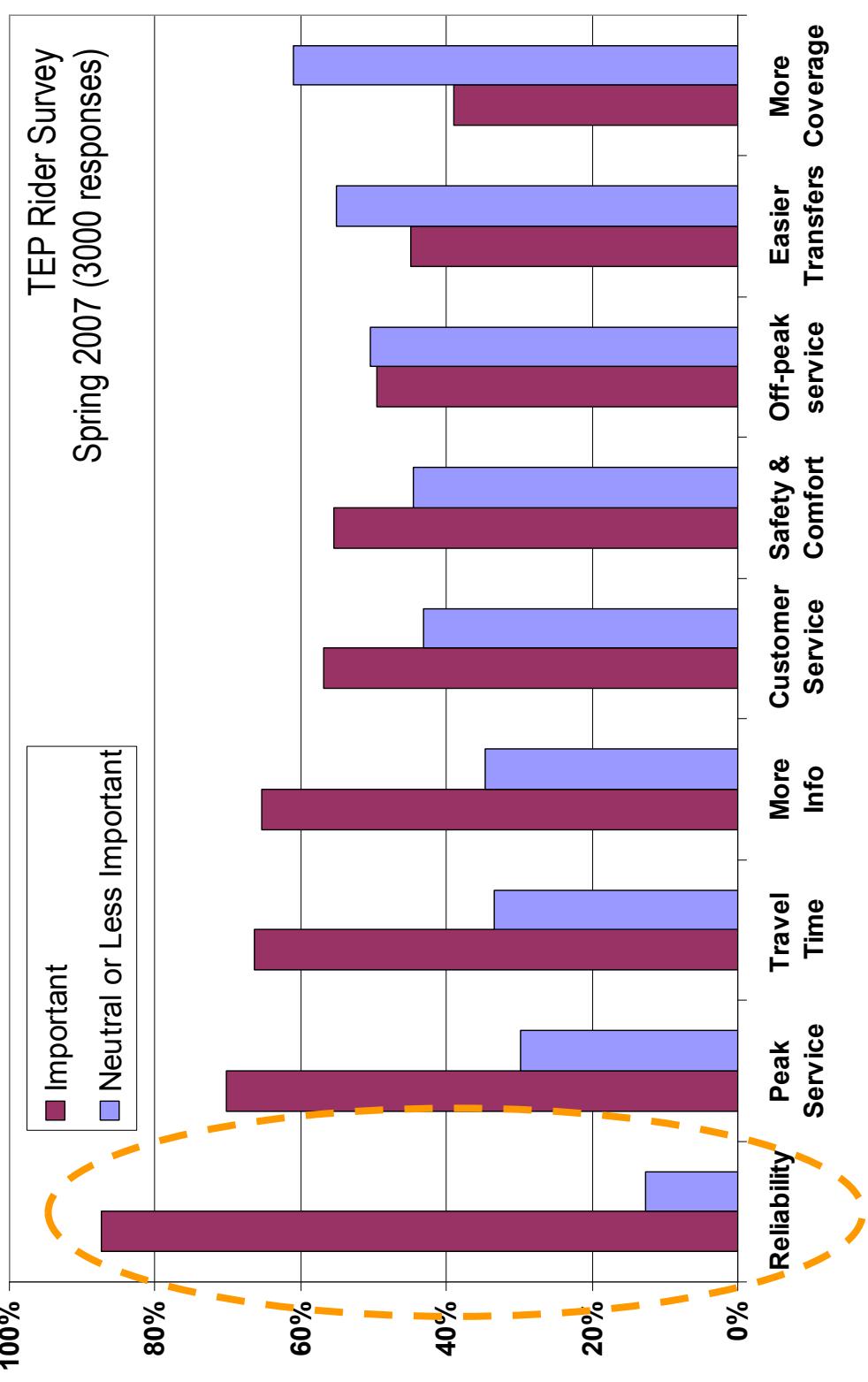
- 
- A Venn diagram consisting of three overlapping circles. The top circle is blue with the text "Technical Analysis". The bottom-left circle is blue with the text "Input/Outreach". The right circle is light blue with the text "Best Practices". The central area where all three circles overlap is shaded black and contains the acronym "TEP" in white.
- **Technical Analysis**
    - Detailed transit route data
    - Consumer research for residents
    - Models of local and regional travel patterns
  - **Input/Outreach**
    - Community workshops, special events, targeted outreach, surveys
    - Employee in-reach
    - Briefings with policymakers
    - Monthly Stakeholder Advisory Committees
  - **Best Practices**
    - Peer comparisons with other large cities
    - New innovative ways to design/deliver transit service

# TEP Stakeholder Input



# Customers Want Reliable Service

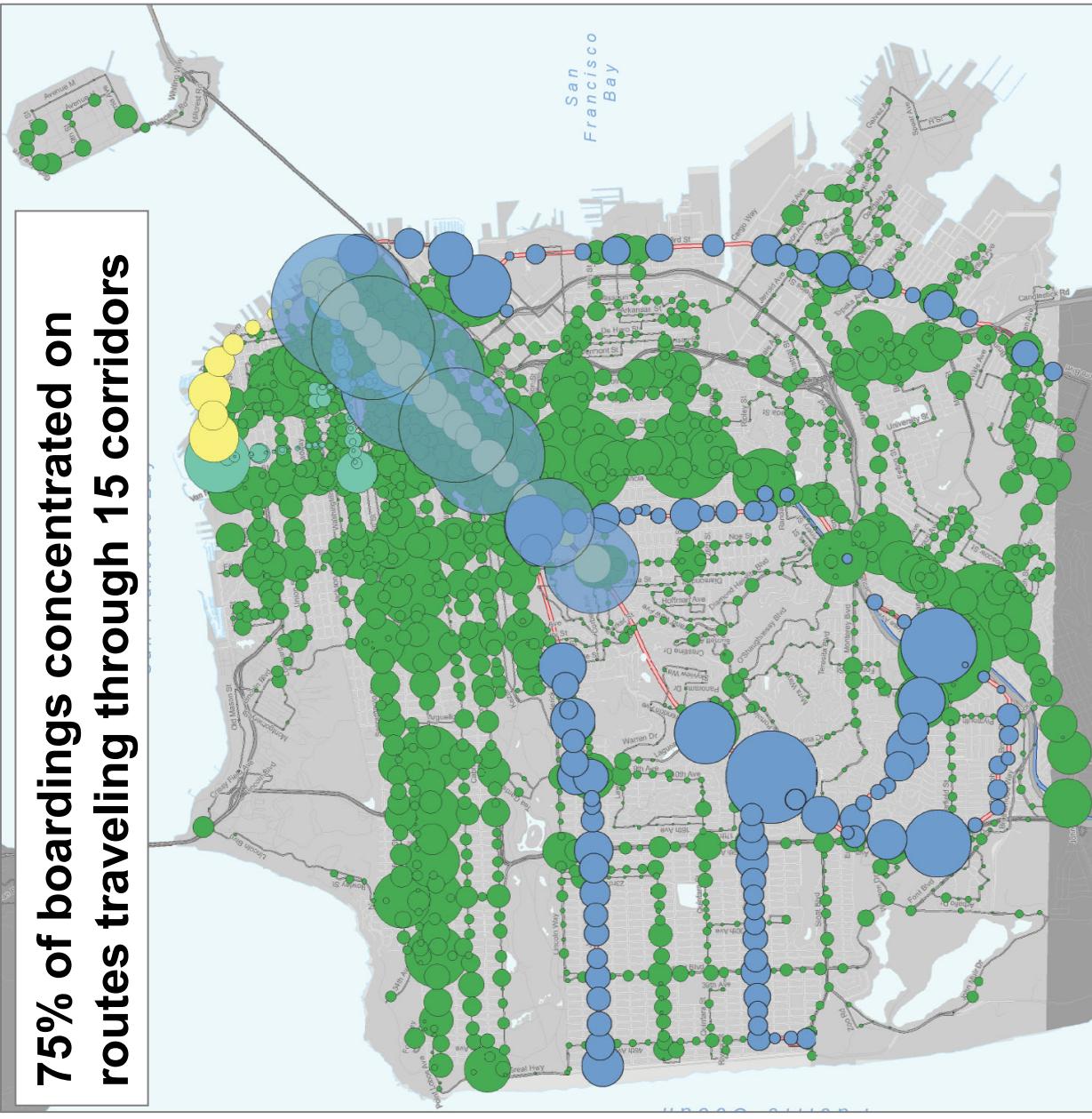
Survey Results: How Important is it to Improve ...



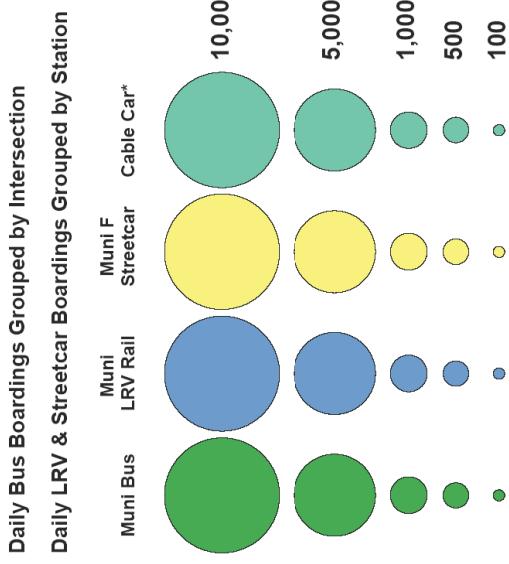
## Recent Reliability Investments

- Schedule adjustments
- Cross-functional teams evaluating conditions and management of busiest routes
- Line management center launched to improve vehicle spacing and reduce bunching
- Training course developed for front-line managers
- Road Call Program to minimize disruptions to service from vehicle breakdowns
- Stimulus proposals focus on bus and rail rehabilitation/state-of-good-repair

**75% of boardings concentrated on routes traveling through 15 corridors**



## Total Weekday MUNI Boardings Post T-Line Implementation



\*Note:  
Cable Car data is peak season  
data from August 24, 2007  
Powell/Mason data not included

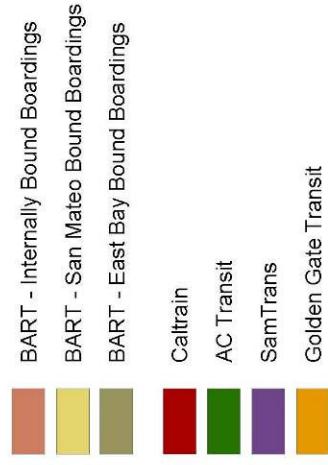
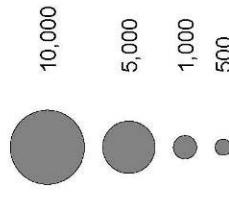
Updated:  
April 2008



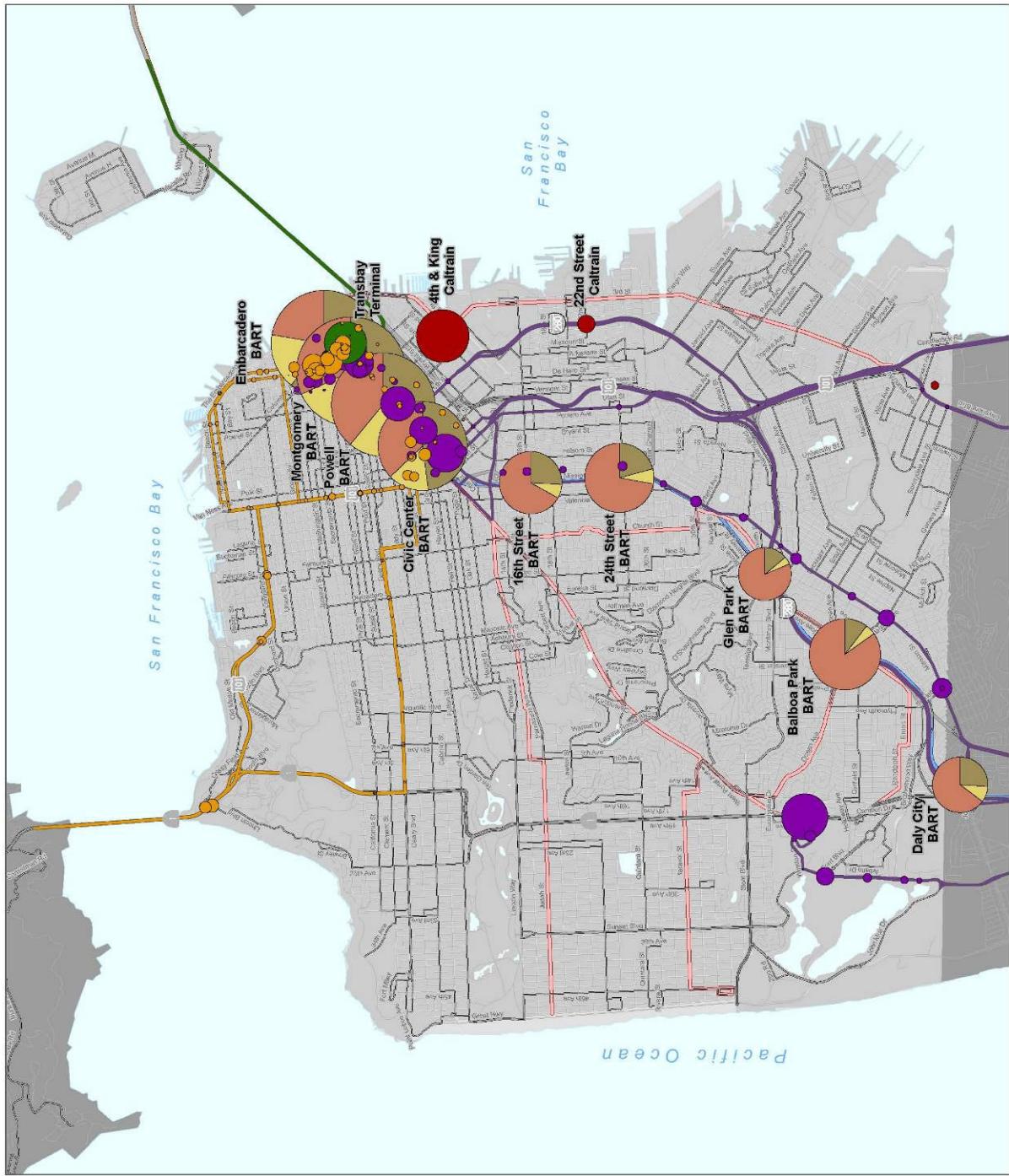
TMD

## Daily Boardings - Regional Operators

### Total Boardings by Stop/Station



**SFMTA** | Municipal Transportation Agency  
Primary Data Source: AC Transit, BART, Caltrain  
Golden Gate Transit, SamTrans, SFCTA, SFGOV  
Secondary Data Sources: SFMTA, SFCTA  
Date: August 2007



# TEP – Service Policy Framework

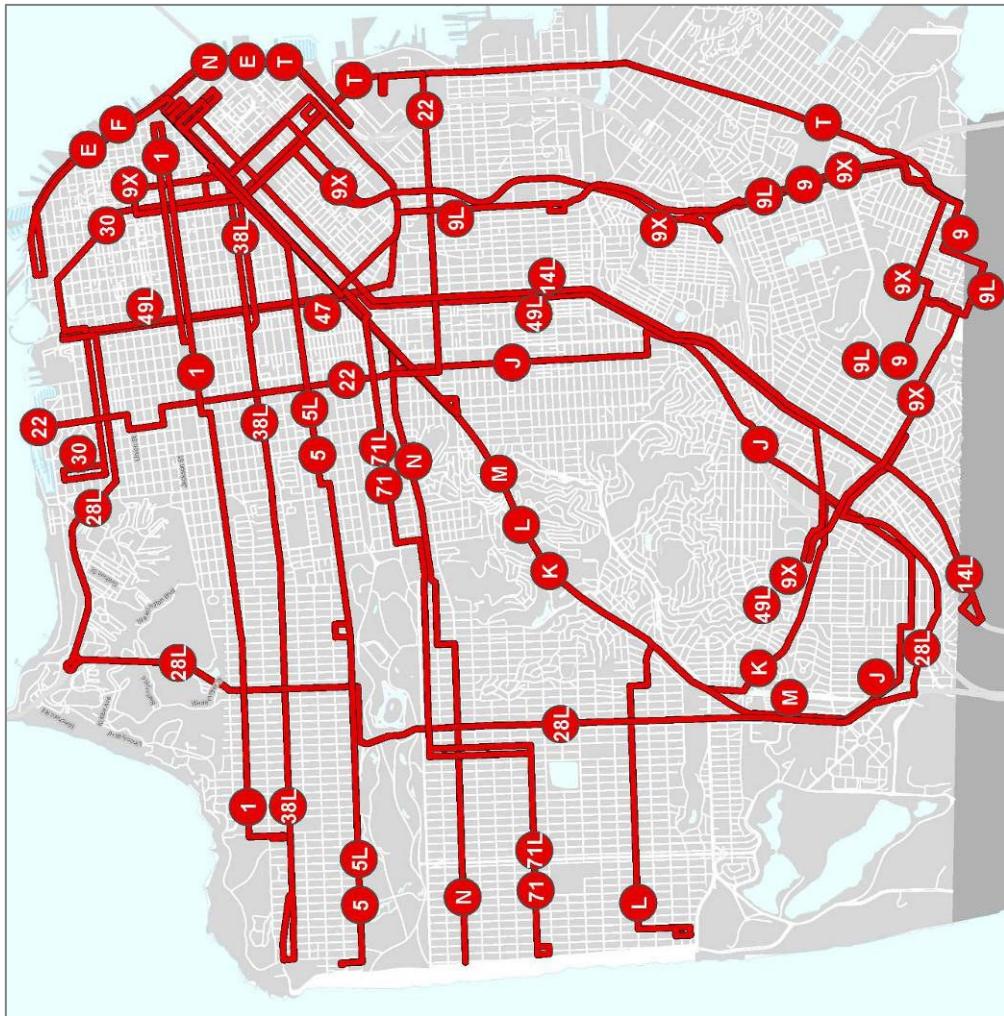
**Rapid Network** – Heaviest ridership lines with the most frequent service (every 5 to 10 min)

**Local Network** – Combine with Rapid Network to create core network (service every 10 to 15 min)

**Community Connectors** – Fills gaps in coverage and connects to core network (service every 15 to 30 min)

**Specialized Services** – Augments all day service and addresses focussed needs (includes express routes)

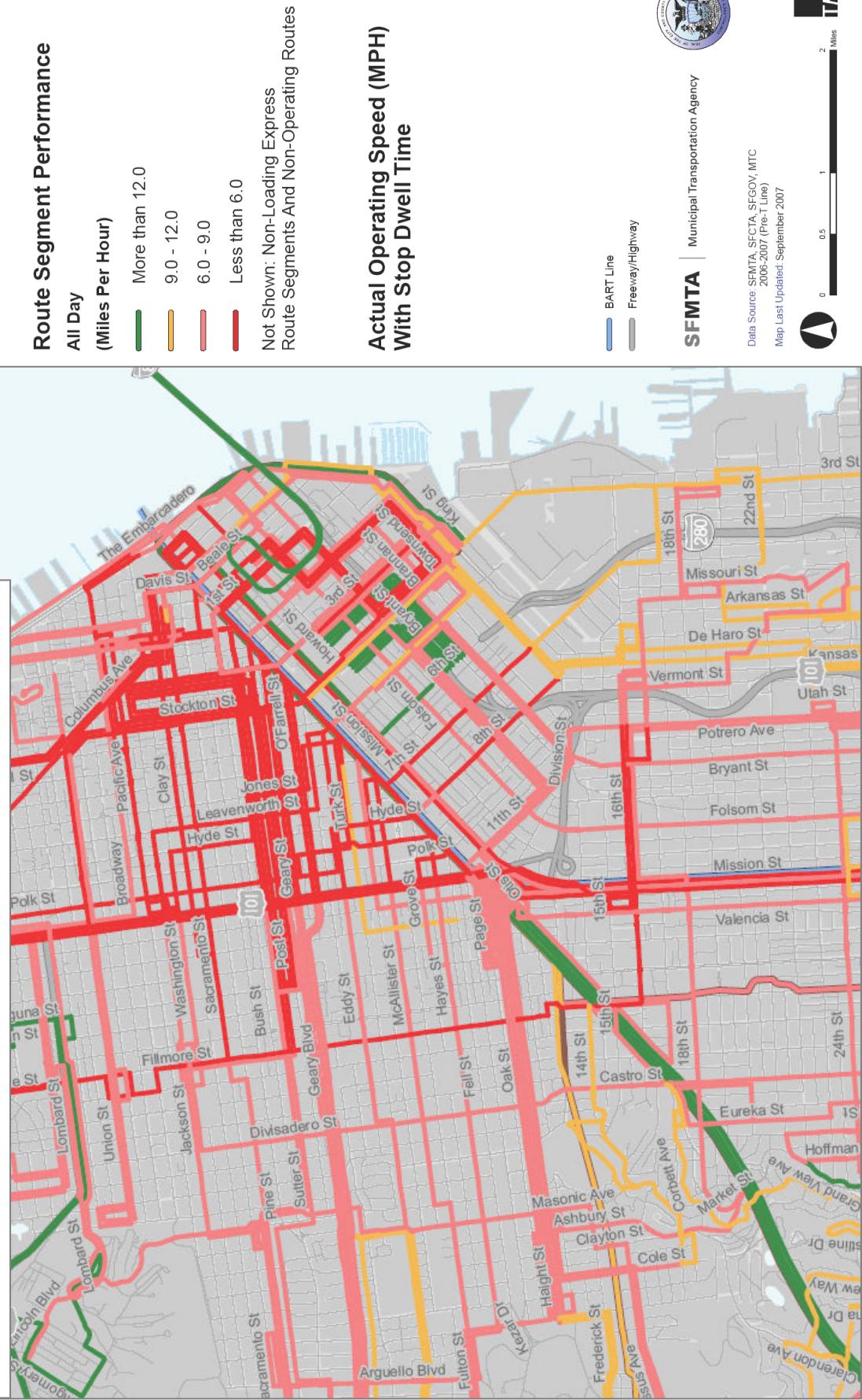
# TEP Service Plan Highlights



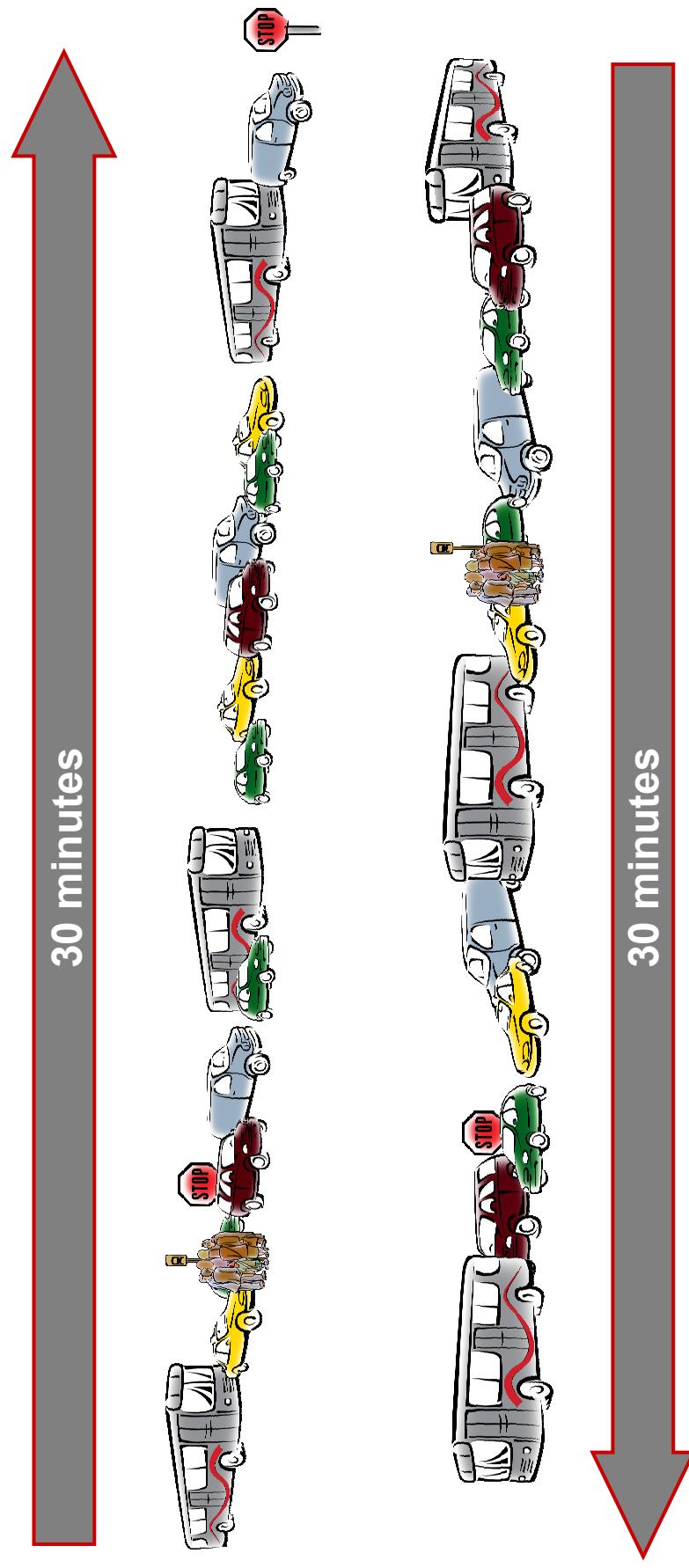
- Rapid Network with premium amenities
  - Expand limited-stop service
  - Neighborhood-friendly fleet of smaller vehicles
  - Reduced crowding on heavy ridership lines
  - Improved regional connections

## Slow travel times frustrate customers and increase Muni costs

### Service Speed SFMTA Bus and Rail Network



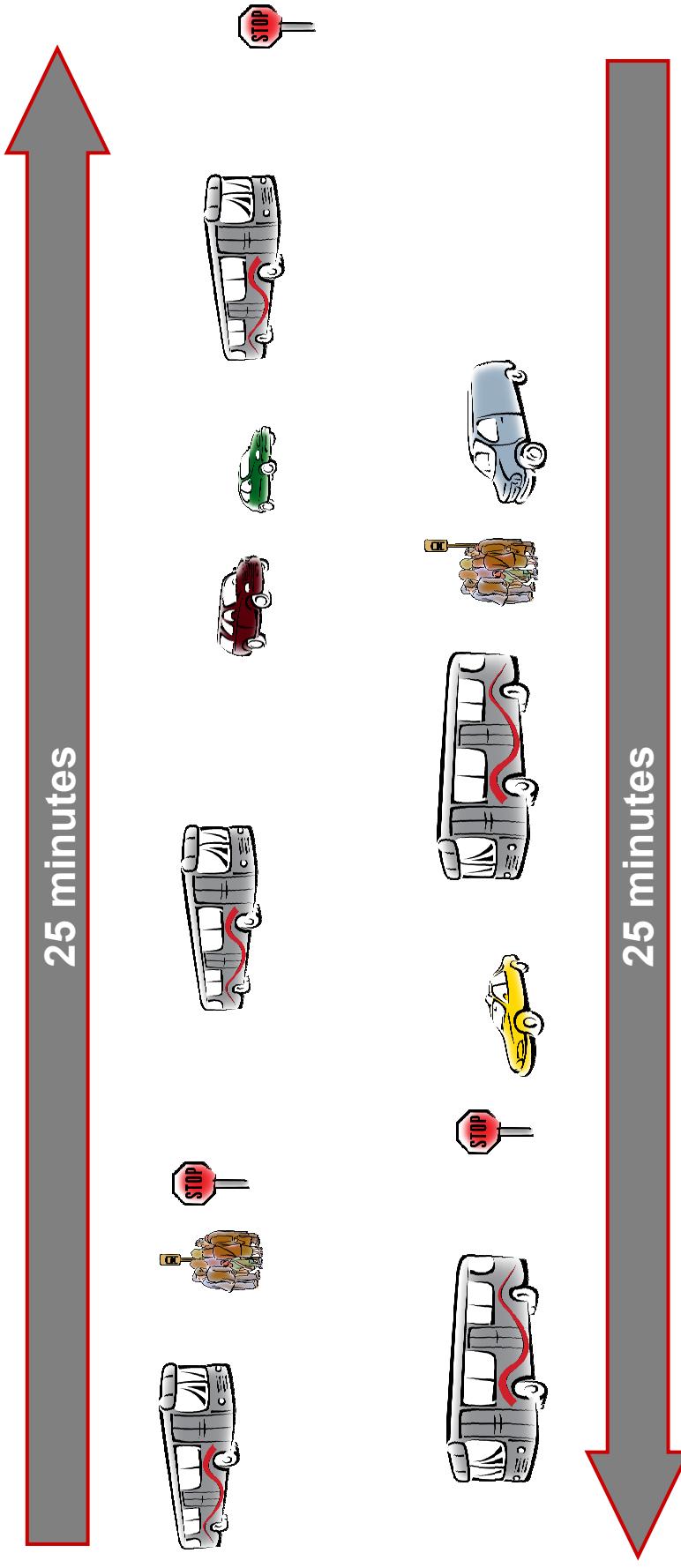
## Bus route... 60 minute travel time



Round Trip Travel Time = 60 minutes

$$\text{Bus every 10 minutes} = \frac{60}{10} = 6.0 \Rightarrow 6 \text{ buses} + 6 \text{ drivers}$$

## Reduce Travel Time and Resources

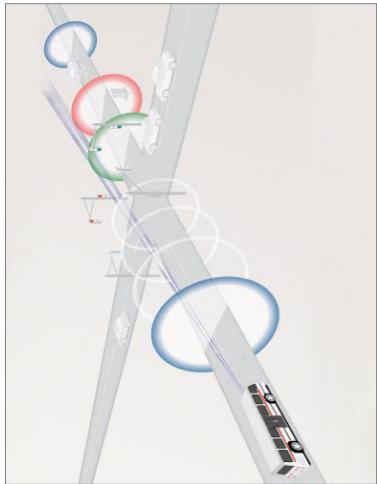


Round Trip Travel Time = 50 minutes

Bus every 10 minutes =  $\frac{50}{10} = 5$  buses + 5 drivers

**17% decrease in cost and travel times!**

# Improve Operating Speed



## TEP System Benefits

- **Better reliability and on-time performance**
- **Improved customer experience**
  - More accessible service on busiest routes & lines
  - Shorter wait times
  - Reduce crowding on vehicles
- **70,000 new daily Muni boardings estimated**
- **Air quality and congestion benefits**

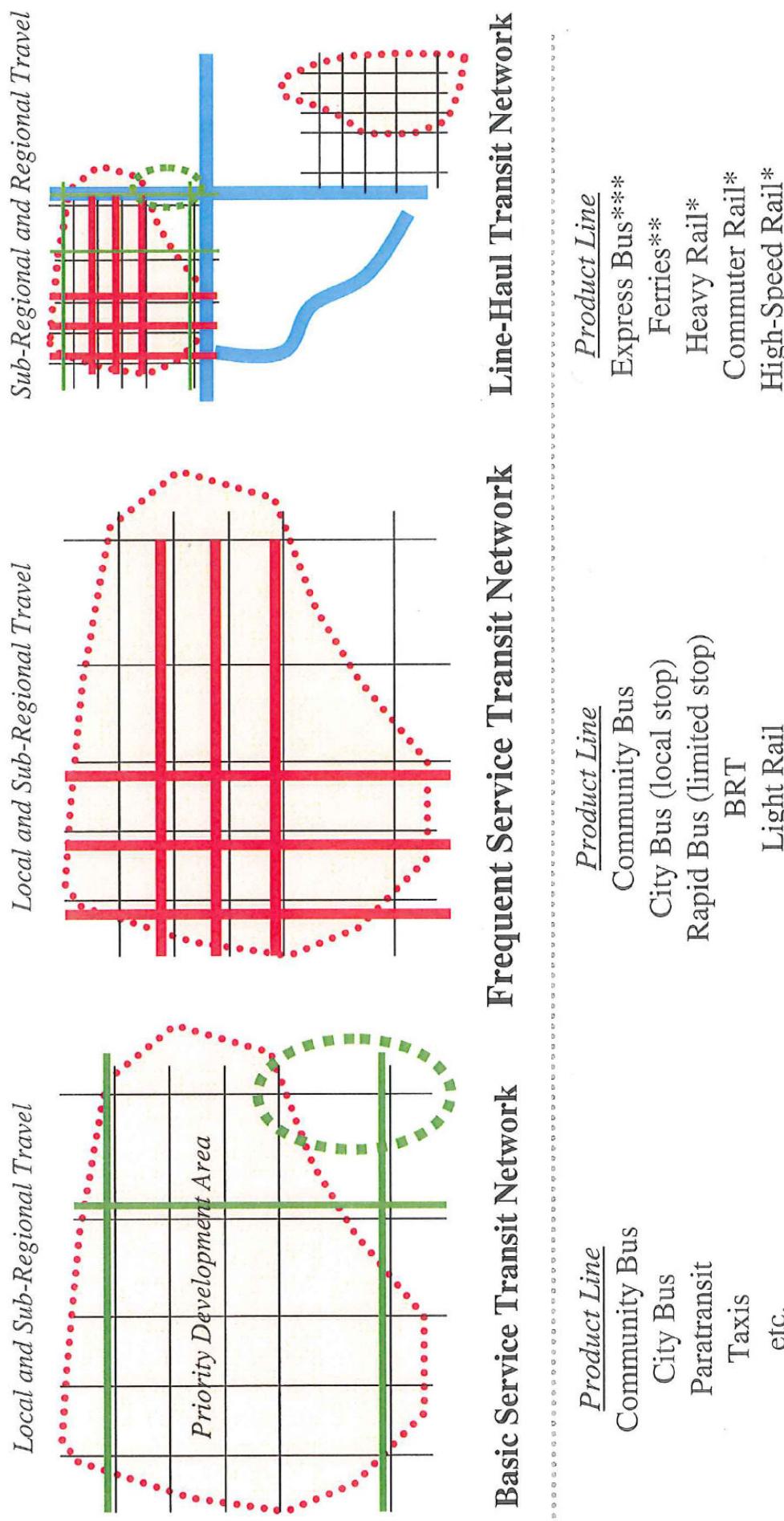
## TEP Next Steps

- **Implementing service reductions and enhancements informed by TEP**
- **Optimizing limited staff resources to improve reliability and on-time performance**
- **Developing 5 year TEP Implementation Plan**
  - Developing target outcomes
  - Designing travel time projects
  - Creating master schedule

# Regional Recommendations

- **Emphasize data-based decision-making**
  - Use to efficiently allocate scarce resources and encourage accountability
- **Identify funding for small-scale capital projects**
  - Invest in reliability and travel time improvements
  - Invest in customer amenities at transit stops
- **Continue development of the “Frequent Service Transit Network” concept**
- **Address current deficiencies and anticipate needs in priority growth areas**

## Figure 1. Three Transit Brands for Three Travel Types



**Service Design and Delivery**

**Cost Containment**

**Governance and Decision-making**

# Cost Containment

- Informed service delivery decisions are paramount
- Service reductions and adjustments alone will not eclipse the projected budget shortfalls
  - Bay Area transit providers on average subsidize passenger trips significantly more than other regional providers
- Need to find large-scale creative solutions to economize and optimize transit service

## Build on Common Needs/Goals

- **Shared administrative services**
  - Grants
  - Finance
  - Procurement
  - Human Resources
- **Pooled regional procurements**
  - Fuel
  - Vehicles
  - Materials and equipment
  - Professional services
- **Work rule changes and other administrative costs**

## Explore Ways to Integrate Systems

- Fare structure
- Service provision (regional network)
- Regional bonding capacity
- Planning
- Research and development
- Eliminate duplication and overlap in functions where possible and economical

## Collaborate to Advocate

- Legislative initiatives and advocacy (state and federal)
- Funding for regional mega-projects
- Federal funding and reauthorization
- Work together to advocate for collective regional benefit

## Starting the Conversation

- **Economic climate has forced this conversation**
  - Budget shortfalls
  - Service reductions and adjustments
  - ARRA/Stimulus funding
- **Ongoing difficulties will sustain the conversation**
  - Projected regional operating and capital shortfalls
  - Continued local pressure to economize and optimize
  - Continued focus on planning, connectivity and regional needs

**Service Design and Delivery**

**Cost Containment**

**Governance and Decision-making**

# Connectivity is the Priority



- **27 Bay Area Transit Providers**
  - Light Rail
  - Commuter Rail
  - High Speed Rail (planned)
  - Buses
  - Ferries

## Governance

- **High cost to administer service for 27 transit agencies**
- **Need to right-size our decision-making process given the cost, ridership and geographic reach of service**
  - Each agency has unique jurisdictional challenges in funding and service provision
  - MTC currently leads regional prioritization for federal formula funds
  - Outstanding question as to how regional governance should be structured: ridership, population, other?
- **Balance service delivery priorities with cost**

## Driving Principles

- Must be willing to take a hard look at how we collectively do business
- Focused regional coordination on service delivery
- Importance of public outreach and engagement

**Questions?**